



United States
Department of
Agriculture

Food Safety and
Inspection
Service

FSIS Safety and Security Guidelines for the Transportation and Distribution of Meat, Poultry, and Egg Products



Dear Establishment Owner/Operator:

In May 2002, FSIS issued the *FSIS Security Guidelines for Food Processors* to assist Federal- and State-inspected meat, poultry, and egg product plants in identifying ways to strengthen their food security protection. At the time we noted our commitment to providing continued guidance to businesses engaged in the production and distribution of USDA-regulated foods. We have worked with the Food and Drug Administration (FDA) and other agencies to now provide guidance for those handling food products during transportation and storage.

The *FSIS Food Safety and Security Guidelines for the Transportation and Distribution of Meat, Poultry, and Egg Products* are designed to assist small facilities and shippers handling these products. The guidelines provide a list of safety and security measures that may be taken to prevent contamination of meat, poultry, and egg products during loading and unloading, transportation, and in-transit storage. In these voluntary guidelines, we strongly encourage shippers and receivers, as well as transporters of these products, to develop controls for ensuring the condition of the products through all phases of distribution. Such controls are necessary to protect the products from intentional, as well as unintentional, contamination. We recognize that not all of these measures will be appropriate or practical for every facility.

Meat, poultry, and egg products are transported by air, sea, and land. Hazards may be present at any point during transportation and distribution, but are most likely at changes between transportation modes and during loading and unloading. Meat, poultry, and egg products frequently are transported multiple times on their way to the consumer and may be exposed to hazards at each step. For example, a product might be transported from a slaughter establishment to a raw-product processing establishment, next to a further processing plant, and then onto distribution sites and retail markets.

The first section of these guidelines provides food safety measures to help prevent the physical, chemical, radiological, or microbiological contamination of meat, poultry, and egg products during transportation and storage. The second section of the guidelines deals specifically with security measures intended to prevent the same forms of contamination due to criminal or terrorist acts. Both sections apply to all points of shipment from the processor to their delivery at the retail store, restaurant, or other facility serving consumers of the products. These guidelines can be applied whether the potential contamination occurs due to an intentional or unintentional act.

For questions or clarification, contact our Technical Service Center at 1-800-233-3935.

Protecting our Nation's food distribution network is essential to the Nation's homeland security. These guidelines are intended to assist the food industry, as well as Federal, State, and local authorities, in that effort.

Sincerely,

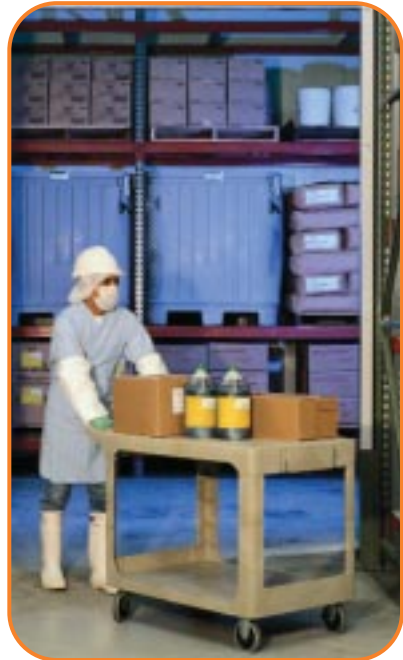
Garry L. McKee, Ph.D., M.P.H.
Administrator

Section I

Food Safety During Transportation and Distribution of Meat, Poultry, and Egg Products

Meat, poultry, and egg products are susceptible to contamination from a wide variety of physical, microbial, chemical, and radiological agents. These products are particularly vulnerable to microbiological hazards because their moisture, pH levels, and high protein content provide ideal environments for the growth of bacteria. Because of these characteristics, the products must be carefully monitored to prevent their exposure.

Food safety protection can be improved by the control of hazards through the use of preventive methods, including good sanitation, manufacturing practices, and the Hazard Analysis and Critical Control Point (HACCP) system throughout the food production and distribution chain. Meat, poultry, and egg products must be refrigerated or frozen after processing and before shipment to inhibit spoilage and growth of pathogens. During transportation and storage, the challenge is to maintain proper refrigeration temperatures and to keep the “cold-chain” from breaking during steps such as palletization, staging, loading and unloading of containers, and in storage.



General Guidance

In the United States, most food is transported by truck. However, meat, poultry, and egg products may be transferred to and from other modes of transportation during shipment and held at intermediate warehouses as well as at transfer or handling facilities, such as airports, break-bulk terminals, and rail sidings. Because transportation and storage are vital links in the farm-to-table food chain, effective control measures are essential at each point in the food distribution chain to prevent unintentional contamination.

The following general guidelines address food safety measures that should be taken by shippers from the point of food production through delivery. The guidelines do not cover breeding, feedlot, or any other pre-slaughter live-animal operations or pre-shipment operations at egg-laying farms.

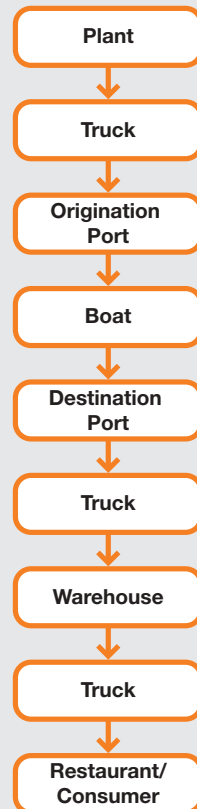


Transportation Safety Plan

☐ Identify vulnerable points and develop a comprehensive transportation sanitation and safety plan.

- Processors and distributors shipping products should assess and implement measures that will ensure the sanitation and safety of products from initial shipment through delivery to other destinations. A flow diagram from the point-of-origin to final destination, including all shipping modes/routes, can be a helpful assessment tool. (See sample flow diagram.)
- Identify all points of vulnerability where there is potential for adulteration or contamination to occur:
 - Identify potential hazards.
 - If control points are identified, then determine the method, frequency, and limit that must be met.
 - Identify if control is possible at the point(s) of hazard and what is the most effective point to exert control.
 - This will determine where and how often monitoring and verification of the limits set should occur and what, if any, corrective and preventive actions should be taken.
 - Define what controls should be put in place to prevent product adulteration or contamination during the transportation and storage process.

Sample Flow Diagram for Food Product Transportation Points in Commerce



- As an additional check on product condition during and after transportation and storage, processors may want to include special arrangements with receivers to sample and conduct microbiological or other tests on products. The results could be compared with pre-shipment results to determine whether adjustments are needed in transport methods or procedures.
- Verify that contracted transporters (e.g. air, ground, maritime, rail) and storage/warehouse facilities have a food safety program in effect. Consider including specific security measures in contracts and verify that measures are being met.
- Include procedures for the immediate recall of adulterated products from trade and consumer channels (this applies to processors, transporters, and wholesale and retail distributors).
- Have a system in place to track your products, including salvage, reworked, and returned products.

□ Train personnel

- Train managers and supervisors involved in the transportation, handling, and storage of food products in food hygiene and sanitation. They should be able to judge potential risks, take appropriate preventive and corrective actions, and ensure effective monitoring and supervision to prevent intentional and unintentional contamination from occurring.
- Train personnel involved in all phases of transport, handling and storage in personal hygiene, vehicle inspection procedures, and transportation procedures that will ensure the safety of meat, poultry, and egg products.



Storage Food Safety System

- ❑ Design and maintain a storage and warehousing food safety system.
 - The facility should permit easy access to all areas for cleaning.
 - Adequately insulate the facility and have an adequate temperature control capacity.
 - Prevent access by unauthorized persons through the use of locks and fences, etc.
 - Have an effective, systematic program for preventing environmental contamination and infestation by insects, vermin, etc.



Vehicles Used To Transport Meat, Poultry, and Egg Products

❑ Design and construct vehicles to protect product.

- Vehicles should be designed and built to make locking and sealing easy, protect the cargo against extremes of heat and cold, and prevent infestation by pests.
- Vehicle design should permit effective inspection, cleaning, disinfection, and temperature control.
- Interior surfaces should be made of materials that are suitable for direct food contact. For example, the surfaces may be made with stainless steel or be coated with food-grade epoxy resins.



❑ Sanitize and properly maintain vehicles.

- Meat, poultry, and egg product transportation vehicles, accessories, and connections should be kept clean and free from dirt, debris, and any other substance or odor that may contaminate the product. They should be disinfected as needed. Cleaning and sanitation procedures should be specified in writing.

- Different cleaning procedures may be necessary for the different types of meat, poultry, or egg products that are to be transported. The type of product transported and the cleaning procedure used should be recorded. Generally, wash water should be at least 180 °F (82 °C) and an approved sanitizer may be used to reduce the number of microorganisms and dissolve any fat particles adhering to interior surfaces.
- Cargo pallets, load securing devices, and loading equipment should be kept clean and free of potential food contaminants and be regularly washed and sanitized.
- Equipment used in transferring meat, poultry, and egg products, such as hand trucks, conveyors, and forklifts, should be well maintained and kept in a sanitary condition.
- Secure transport vehicles to prevent tampering when not in use.

☐ Use dedicated transport vehicles.

- Transport vehicles, containers, and conveyances should be designated and marked “for food use only,” and be used only for transporting foods. If feasible, they should be restricted to a single commodity. This reduces the risk of cross contamination from previous cargoes.

Pre-Loading

- ❑ **Loading and unloading areas should be configured, cleaned, disinfected (where appropriate), and properly maintained to prevent product contamination.**
 - Loading or unloading facilities should be designed to permit easy access to all areas for cleaning.
 - Facilities should be adequately insulated and have an adequate temperature control capacity.
 - Facilities should have an effective, systematic program for preventing environmental contamination and infestation by insects, vermin, etc.

- ❑ **Examine vehicles before loading.**
 - Trailer or truck body should be sufficiently insulated and be in good repair with no holes in the body that might allow heat, dust, or other adulterants to enter the cargo area.
 - Check for residues of previous cargoes.
 - Check for residues from cleaning and sanitizing compounds.
 - The cooling unit must be in good repair and operating. Both truck drivers and plant personnel should check the functioning of the trailer refrigeration unit.
 - Trailers and trucks should be pre-cooled for at least 1 hour before loading to remove residual heat from the insulation and inner lining of the trailer as well as from the air of the trailer. For pre-cooling, the doors should be closed and the temperature setting of the unit should be no higher than 26 °F. (Note, however, that poultry products labeled “fresh” must be shipped at temperatures higher than 26 °F, usually between 26 °F and 32 °F)
 - Inspect trailers prior to loading to determine that the air chutes, if used, are properly in place and that the ribbed floors are unlogged so that adequate air circulation can occur.
 - Examine trailer doors and seals to ensure that they can be secured and that there will be no air leaks.

- When shipping a mixed load of products, such as both frozen and refrigerated products, it may be necessary to use a trailer with compartments that accommodate different temperature or other handling requirements.



- **Stage loads to facilitate proper stowage and minimize exposure during loading and unloading.**
 - Proper staging of loads is especially important when there are loads of products with different temperature requirements, or different delivery destinations.
 - Dock foremen should document that all freight is 40 °F or lower before loading. Freight should not be allowed to remain on the loading dock in warm weather in order to prevent the product temperature from rising above 40 °F.
 - *Note:* Federal regulations require processed poultry to be packaged and shipped at a temperature no higher than 40 °F.

Loading

- ❑ Protect products from exposure to environmental contaminants such as microbes, dust, moisture, or other physical contamination.
- ❑ Maintain the “cold chain” to ensure meat, poultry, and egg products are kept at appropriate temperatures continuously throughout all phases of transport.
 - Meat, poultry, and egg products must be kept refrigerated and protected from temperature changes. All persons involved in the transportation, storage, and handling of these products are responsible for keeping them at appropriate temperatures and preventing any break in the cold chain.



- Maintain the appropriate temperature of the pre-cooled product by minimizing the time of loading or unloading, conducting the loading and unloading in an appropriately chilled environment, and reducing the amount of surface contact of the product with floors and walls of the storage areas or loading equipment.
- Appropriately packaged meat, poultry, or pasteurized egg products can be stacked, provided that air circulation is sufficient to maintain the temperature of the products during shipment.
- Product should be at the desired transit temperature before loading. The boxes and pallets should be secured within the vehicle and pallets should be center-loaded off the walls of the vehicle.
- Seal vehicles shipping egg products from one official plant to another for pasteurization, re-pasteurization, or heat treatment. (A certificate stating that the products are not pasteurized or that they have tested positive for Salmonella should accompany applicable shipments.)

❑ Use appropriate loading procedures and equipment.

- Use spacers on sidewalls and at the ends of trailers as well as pallets on the floor so that proper air circulation can be maintained.
- Keep loading time as short as possible to prevent temperature changes (increases or decreases) that could threaten the safety or quality of food products.
- Close doors immediately after the truck/trailer has pulled away from dock.

❑ Use special care with mixed or partial loads.

- Partial and mixed loads increase the frequency and duration of open doors, leading to a greater possibility of temperature fluctuations and exposure to tampering.
- Other factors affecting temperature include the time of loading and unloading, the number of stops, the total length of the haul from origin to destination, and the outside temperature.
- During periods of warm weather, loading or unloading should be done in the evening or early morning to minimize the likelihood of products warming.

In-Transit

Establish procedures to periodically check integrity of the load during transit.

- Check for leakage of heating or cooling fluid onto food products.
- Monitor the temperature and function of the refrigeration unit at least every 4 hours. If there is a unit malfunction, the problem should be corrected by an authorized refrigeration mechanic before the temperature of the load rises.
- Check for breakdown of temperature control.
- Use time-temperature recording, indicator, or integrator devices, if they are available, to monitor the condition of cargo. Check the devices every 4 hours.

Establish procedures to ensure product safety during interim storage.

- Maintain logbook documenting product condition upon arrival and during storage.
- Ensure proper temperatures are maintained during storage of meat, poultry, and egg products.



Unloading

❑ Carefully examine incoming products.

- Product should be inspected and sorted before being accepted at any point during transportation.
- Develop and implement methods to check and document condition of product and packaging upon receipt at destination. Examine checks of time-temperature recording, indicating or integrator devices or, by prior arrangement with the shipper, test to determine if bacterial growth has occurred after the product was packaged and shipped.
- Include procedures for the safe handling and disposal of contaminated products. Identify where and how to separate contaminated products.
- Establish policy and procedures for rejection of packages and products that are not acceptable, can't be verified against the delivery roster, or contain unacceptable changes to shipping documents. Have a monitoring plan and record-keeping system in place to document steps taken.
- Do not accept products known to be, or suspected of being, adulterated.

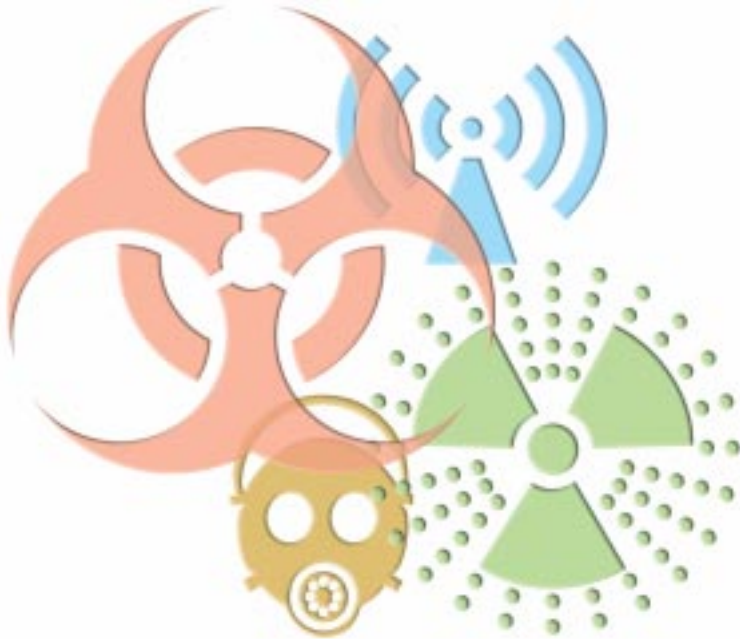
❑ Move product from the loading dock into cold storage immediately to minimize product exposure to heat and contaminants.



Food Security During Transportation and Distribution Of Meat, Poultry, and Egg Products

The tragic events of September 11, 2001, forever changed our world. They proved to us that the unthinkable could become reality, and that threats to our Nation's food supply are very plausible from those who want to harm us through any possible means. Since the terrorist attacks on America, security—including food security—has been the highest priority at both the Federal and State levels.

Ensuring safe food within the processing plant, during transportation, in storage, and at retail is a vital function to protect public health. We must now look at all possible threats, examine the risks, and take action to prevent any intentional attack on the food supply.



General Guidance

Meat, poultry, and egg products are susceptible to intentional contamination from a wide variety of physical, chemical, biological, and radiological agents. Everyone in the food distribution system is responsible for ensuring that these products are safe, wholesome, and unadulterated. Therefore, as part of this system, those responsible for transportation and delivery should implement every possible security measure to ensure the integrity of the products throughout the supply chain.

There are many potential benefits of having an effective security plan in place such as:

- Protects public health and assets;
- Increases public and customer confidence, including trading partners;
- Provides value-added component to product;
- Deters theft and tampering;
- Creates production and distribution efficiencies;
- Maintains greater control over product through supply chain; and
- Possibly reduces insurance premiums and freight rates.

The guidelines below provide a list of security measures to be considered by processing plants, shipping companies, and warehouse facilities to minimize the risk of tampering or other criminal action for each segment of the food-delivery system.



Security Plan

Assess Vulnerabilities

- ❑ Identify a food protection management team and assign a leader to verify required actions are implemented and effective.
- ❑ Develop a comprehensive transportation security plan and assess vulnerabilities using a recognized threat/risk/vulnerability model such as Operation Risk Management (ORM) and Systematic Assessment of Facility Risk (SAFR). A flow diagram from your point-of-origin to final destination, including all shipping modes/routes, can be a helpful tool in your assessment. (See page 5 for sample flow diagram.)
- ❑ In your security plan, identify all points of vulnerability where there is the potential for intentional adulteration or contamination to occur during the transportation and distribution process:
 - Identify potential biological, chemical, and physical hazards.
 - Identify if control is possible at the point(s) of hazard and what is the most effective point to exert control.
 - If control points are identified, then determine the method, frequency, and limit that must be met.
 - This will determine where and how often monitoring and verification of the established limits should occur and what, if any, corrective and preventive actions should be taken.





Develop and Implement Procedures

- ❑ Implement identified security measures at each point to ensure the protection of products from the time of shipment through delivery to each destination.
- ❑ The plan should include a system to identify and track your product at any time during transportation and distribution such as the use of tamper-resistant seals corresponding to specific shipments and their documentation.
- ❑ Verify that contracted transporters (e.g. air, ground, maritime, rail) and storage/warehouse facilities have a security program in effect. Consider including specific security measures in contracts and verify that measures are being met.

- ❑ Include procedures for the immediate recall of adulterated products from trade and consumer channels.
- ❑ Have a system in place to track salvaged, reworked, and returned products.
- ❑ Include procedures for handling threats to and actual cases of product tampering.
- ❑ Establish an evacuation plan for the facility.
- ❑ Include procedures for the safe handling and disposal of contaminated products. Identify where and how to separate suspected products.
- ❑ Develop and implement methods to check and document condition of product and packaging upon receipt at destination.
- ❑ Establish policy and procedures for rejection of packages and products that are not acceptable, can't be verified against the delivery roster, or contain unacceptable changes to shipping documents. Have a monitoring strategy and recordkeeping system in place to document steps taken.
- ❑ Establish policy and procedures for allowing rail crew, truckers, etc., to enter the facility and monitor their activities while on the property.
- ❑ Food security plans should be kept in a secure location and shared on a "need-to-know" basis.

Emergency Operations

- Regularly update a list of local, State, and Federal emergency contacts, local Homeland Security contacts, and local public health official contacts.
- Develop procedures for notification of appropriate authorities if an event occurs.
- Identify all entry and exit points available to emergency personnel in the plan.
- Develop a strategy for communicating with the media, including identifying a spokesperson, drafting press statement templates, or referring media to trade association or corporate headquarters.

Train and Test

- Train each team member in all provisions of the plan.
- Conduct drills regularly to test and verify the effectiveness of the plan. Continually review policies and procedures in the plan. The food-protection management team leader should coordinate these activities.



Screen and Educate Employees

- ❑ Screen all potential employees, to the extent possible, by conducting background and criminal checks appropriate to their positions, and verifying references (including contract, temporary, custodial, seasonal, and security personnel). When this is not practical, such personnel should be under constant supervision and their access to sensitive areas of the facility restricted.
- ❑ Consider participating in the Immigration and Naturalization Service (INS) pilot program for screening (1-888-464-4218).
- ❑ All employees should be trained on how to prevent, detect, and respond to threats or terrorist actions so they can recognize threats to security and respond if necessary.
- ❑ Promote ongoing security consciousness and the importance of security procedures.
- ❑ Personnel involved in the transport, handling, and storage of meat, poultry, and egg products should be trained in procedures that will ensure the security of these products (e.g., train dock and security personnel on documentation requirements for incoming and outgoing shipments).
- ❑ Train appropriate personnel in security procedures for incoming mail, supplies, and equipment deliveries. Mail handlers should be trained to recognize and handle suspicious mail using U.S. Postal Service guidelines.
- ❑ Ensure employees know emergency procedures and contact information.
- ❑ Encourage employees to report any suspicious activities such as signs of possible product tampering or break in the food security system. Have a tracking system in place for these reports and follow-up activities.



Secure the Facility

Access

- Maintain a positive ID system for employees. Require identification and escort visitors at all times in your facility.
- Collect company-issued IDs, keys and change lock combinations when a staff member is no longer employed by the company.
- Ensure clear identification of personnel to their specific functions (e.g. colored hats or aprons, ID cards).
- Restrict types of personal items allowed in the establishment, especially firearms or other weapons.
- Secure and restrict access to facilities, transportation trucks, trailers, or containers, locker rooms, and all storage areas with alarms, cameras, locks and fences or other appropriate measures, to prevent access by unauthorized persons.
- All visitors should be escorted while on the premises. Establish procedures for handling unauthorized persons in a restricted access area.
- Control access to food products by unauthorized persons by limiting access to food delivery, storage, food ingredient, and chemical storage areas.

- ❑ Restrict access to computer data systems. Protect them using firewalls, virus detection systems and secure passwords, changing them routinely.
- ❑ Restrict access to outside water tanks, water supplies, ice machines, and conveying water pipes.
- ❑ Restrict access to central controls for heating, ventilation, and air conditioning (HVAC), electricity, gas, and steam systems to prevent contamination from entering the air distribution systems.



Shipping/Receiving

- ❑ Consider developing a checklist for shipping and receiving procedures (this can also help identify anomalies).
- ❑ Loading docks should be secured to prevent unauthorized deliveries.
- ❑ All deliveries should be scheduled and truck drivers should show proper identification upon arrival.
- ❑ Shipping documents should contain product information, name of carrier(s), driver information, and seal numbers.
- ❑ Establishments should require that incoming shipments be sealed with tamper-proof, numbered seals, and that the seal numbers are shown on the shipping documents for verification prior to entry to the facility.

- ❑ Shipping documents with suspicious alterations should be thoroughly investigated. Product should be held and segregated during investigation process.
- ❑ Properly secure transportation trucks, trailers, or containers:
 - Doors should not be left open when picking up a load from a warehouse.
 - Ensure shipping trucks, trailers, and containers are secured after loading is complete.
 - Lock transportation trucks, trailers, and containers when not in use, during meal breaks and at night.
- ❑ Apply seals to all containers being shipped and maintain a seal log. Have a system in place to verify seal numbers and the integrity of the seals throughout the distribution process.
- ❑ Ensure security procedures are in effect for interim storage at in-transit warehouses.



Facility

- Designate limited and specific entry and exit points for people and trucks.
- Secure all access and exit doors, vent openings, windows, outside refrigeration and storage units, trailer bodies and bulk storage tanks.
- Ensure adequate interior and exterior lighting at the facility.
- Parking areas for visitors should be situated away from the main facility, if practical. Vehicles of employees and visitors should be clearly marked (e.g., placards, decals). This is intended to identify vehicles authorized to be on the premises and deter bombing attempts.
- Hazardous chemical storage areas or rooms should be secured and located away from food preparation and storage areas. In addition, they should be constructed and safely vented in accordance with national or local building codes.
- Incoming mail should be handled in an area of the facility separate from food handling, storage, or preparation areas.
- Install backflow devices on all water supply equipment.

Monitor Operations

Employees

- Maintain a daily shift roster to easily identify persons who are/should be on the premises and indicate that they are in their appropriate location.
- Provide appropriate level of supervision to all staff, including food handlers, cleaning and maintenance staff, and computer support staff.
- Monitor employees for unusual behavior (e.g., staying unusually late, arriving unusually early, taking pictures of the establishment, or removing company documents from the facility).

Shipping/Receiving

- ❑ Purchase all food ingredients, food products, and packaging materials only from known, reputable suppliers. Require Letters of Guaranty, if possible.
- ❑ Require locked or sealed trucks, trailers, or containers for deliveries. Maintain an inbound load verification logbook. Verify inbound trucks for seal numbers and integrity and load manifest. Document seal numbers and the truck or trailer number.
- ❑ Hold unscheduled deliveries outside the premises pending verification of shipper and cargo. Do not accept deliveries from, or release product to, unknown shippers using only cell phone numbers or known shippers with unknown phone/fax numbers or e-mail addresses.



- ❑ Supervise off-loading of incoming products, ingredients, packaging, labels, and product returns. Only a supervisor or other agent of the owner should break seals and sign off in the trucker's logbook.

- ❑ Have system in place to ensure integrity of product when seal will need to be broken prior to delivery due to multiple deliveries or for inspection by government officials.
- ❑ Verification of the last company seal put on a truck should be available throughout the delivery chain.
- ❑ Examine incoming products and their containers for evidence of tampering or adulteration:
 - Determine a random or other sound plan for checking incoming product;
 - The warehouse supervisor should note on the bill of lading any problems with the condition of the product, packaging, labels, and seals;
 - Do not accept products known or suspected of being adulterated; and
 - Check food for unusual odor or appearance.
- ❑ Processors may want to arrange with receivers to sample and conduct microbiological or other tests on products.
 - This would require an in-house testing plan prior to shipment.
 - The results should be compared with pre-shipment results to determine whether adjustments are needed in transport methods or procedures.
 - Establish chain-of-command procedures providing for the proper handling of samples.
 - Samples should be clearly marked and kept in a secure area.
- ❑ Ensure all trucks leaving the facility are sealed.
- ❑ Maintain a logbook of seal assignments.

Storage/Water

- Maintain an accurate inventory of food and chemical products and check daily to allow detection of unexplained additions to, or withdrawals from, existing stocks. Include information about the sources and date of shipment. All discrepancies should be investigated immediately.
- Perform random inspection of storage facilities (including temporary storage trailers or containers), trucks, trailers, containers, and vessels regularly. Keep a log of results. Designate an individual to conduct the inspection and have a record-keeping system in place.
- A daily inventory of hazardous chemicals or other products should be made, and all discrepancies should be investigated immediately.
- Regularly test water and ice supply to ensure it is safe to use.
- Inspect water storage and conveying lines inside and outside of the facility regularly for tampering or irregularities.

Respond

- Be aware of and report any suspicious activity to appropriate authorities (e.g., unscheduled maintenance, deliveries, or visitors should be considered suspicious).



- ❑ Processors, transportation managers, and wholesale and retail distributors should ensure traceability and recall of products.
- ❑ Ensure procedures are in place to accomplish a complete, rapid recall, and removal from the market of any shipment of meat, poultry, and egg products in the event products are found to present a hazard to public health.
- ❑ Keep detailed production records, including packaging lot or code numbers and where finished product was stored or served.
- ❑ *Trace Forward* – Shippers (including operators of federally inspected meat, poultry, and egg processing establishments) and carriers should have systems in place for quickly and effectively locating products that have been distributed to wholesalers and retailers.
- ❑ *Trace Backward* – Retailers, wholesalers, carriers and others who have received products from federally inspected meat, poultry, or egg processing establishments should be able to identify the source of the products quickly and efficiently.
- ❑ Investigate threats or reports of suspicious activity swiftly and aggressively.
- ❑ In the event of a food security emergency, first contact your local law-enforcement authority.

Additional Guidance for Specific Modes of Transportation

Of the approximately 200.5 billion metric tons of food shipped internationally each year, 60 percent goes by sea, 35 percent by land, and 5 percent by air. Domestically, most food products move via ground transportation (truck and rail). Thus, it is critical that everyone involved in the food delivery system understands his or her role and responsibility to ensure the security of meat, poultry, and egg products to the end point or consignee. Recognizing the inter-modal nature of this system, a multi-layered approach to protecting food is essential.

General Guidance For All Modes

Make certain that contracted shippers and consignees have security measures in place to ensure product integrity and traceability and verify that they are meeting contractual security obligations. Security measures should include:

- Physical boundaries of the facility/terminal are secure;
- Background checks are conducted for all potential employees by shipping, trucking, and drayage companies;
- A positive identification system is in place for all employees. (Recommend requiring participation in the Transportation Worker Identification Card (TWIC) program which is coordinated by the Transportation Security Administration);
- A security training and awareness program for all employees on how to prevent, detect, and report suspicious activity is conducted;
- A system is in place to track movement of products and truck, trailer, and containers/vessels (e.g., Global Positioning System);
- Maintains record-keeping system to document chain-of-custody, which will aid in tracing product;
- Uses a system (e.g., X-ray scanners) to detect tampering and radiological, biological, and chemical agents in shipping containers;
- Policies and procedures are in place for the handling of suspicious product; and
- Ensures all containers are properly secured at all times when held in storage yards.



Aviation

- ❑ Although fewer meat, poultry, and egg products are transported by air than by other modes, it is still critical to ensure the security of these products when this mode of transport is utilized.
- ❑ Check all trucks entering a terminal facility.
- ❑ Trucks carrying meat, poultry, and egg products should have seal logbooks and the seals should be examined and numbers verified.
- ❑ Inspect containers arriving at a terminal for loading before admitting them to the terminal.
- ❑ Immediately report suspicious or inconsistent servicing of a container to terminal security.
- ❑ Design internal and external packaging so customers will be able to determine if the product was tampered with and can immediately notify you. Provide instructions and contact information with shipment.

Truck

Approximately 21 million trucks transport products across the United States every day. Keeping containers secure is a huge undertaking as there can be many opportunities for tampering.

- Develop and implement procedures for drivers to ensure security of the truck, trailer, or container when stopping for meals, gas, and repairs.
- Transportation trucks, trailers, and containers should be designed and built to make locking and sealing easy and should permit effective inspection.
- Examine trailer doors and seals to ensure that the trailer can be secured.
- Keep empty trailers locked at all times.
- Check product load periodically during transit to ensure its integrity has not been compromised (e.g., use weigh station stops as an opportunity to check condition of products).
- Processors, distributors, and transporters should have action plans for emergencies, such as breakdowns or reporting criminal activity. The plans should include notification of the relevant Federal, State, and local authorities.



- ❑ Drivers should be trained to take appropriate precautions while en route (e.g., do not pick up hitchhikers, do not discuss the nature of cargo at stops, be aware of surroundings, lock truck, trailer, or container when unattended and avoid low-lit areas).
- ❑ Prevent unauthorized access to delivery truck, trailer, or containers. Require drivers to secure truck, trailer, or containers while en route, including while on break, at restaurants, at overnight stays, etc.
- ❑ Drivers should report unusual circumstances, such as being followed, to appropriate authorities.
- ❑ Develop procedures to be followed when reefer boxes or trailers are found unlocked.
- ❑ Deter diversion or hijacking of cargo by keeping track of trucks. Ensure time logs for trips are maintained and provide trucks with communication and tracking equipment.
- ❑ Hold drivers accountable for ensuring security measures are taken to prevent contamination of meat, poultry, and egg products while under their control.

Maritime

- ❑ Ports are vulnerable due to their size, accessibility by water and land, location in metropolitan areas, and the quantity of products moving through them. Approximately 80% of U.S. imports arrive via American seaports, yet U.S. Customs physically inspects only a fraction of all containers; the remainder are electronically screened. Therefore, enhanced security measures are necessary for products shipped by sea.
- ❑ Check all trucks entering a terminal facility. Trucks carrying meat, poultry, and egg products should be sealed, drivers should have seal logbooks, and the seals should be verified.
- ❑ Seals should be removed in the presence of terminal personnel so they can verify the seal number and its integrity.
- ❑ Immediately report suspicious or inconsistent servicing of a container to terminal security.
- ❑ Supervise opening of ship hatches.
- ❑ When unloading product from sea-going vessels, inspect seals for evidence of tampering. Have documentation system in place.



- ❑ Document cutting of seals (e.g., when seal is cut for inspection by government official).
- ❑ Shipping line agents should provide importers and customs brokers with a record of vessel discharge and checks at discharge and in transit.
- ❑ Establish policy and procedures to download reefer electronic information during inspection (this will also allow identification of anomalies);
- ❑ Have reporting system in place when the discharging of any product looks suspicious or the product shows evidence of tampering.
- ❑ The terminal facility should be locked during meal breaks and at night.
- ❑ Facility doors should be closed immediately after the truck/trailer has pulled away from dock.

***Importers and Exporters may want to consider participation in government initiatives pertaining to maritime shipment of products such as:**

- Customs-Trade Partners Against Terrorism (C-TPAT)
- Operation Safe Commerce
- Container Security Initiative
- Sea Carrier Initiative Agreement

Rail

Rail transportation is an integral part of the domestic food distribution system, therefore, it is important to recognize that unsecured containers can be easy targets for tampering and address this vulnerability.

- ❑ Use boxcars dedicated for food products.
- ❑ Employ measures to secure loaded and empty containers from tampering when being stored at the trainyard for any length of time.
- ❑ Locks/seals on boxcars should be inspected at pull and place.
- ❑ Review shipping documents upon arrival at the trainyard and before the train engineer leaves.
- ❑ Inspect integrity of seals upon arrival and before departure of the load.



If you have questions or need clarification about the guidelines, contact the FSIS Technical Service Center at: 1-800-233-3935.

Obtain additional copies of the guidelines at: www.fsis.usda.gov or call 202-720-9113.

Further information on the safe and secure transportation of food is available from:

- **USDA Agricultural Marketing Service:**
<http://www.ams.usda.gov/tmd/tseb/>
- **Transportation Security Administration:** <http://www.tsa.dot.gov>
- **Food and Drug Administration:**
<http://www.cfsan.fda.gov/~dms/secguid6.html>
- **Federal Aviation Administration:** <http://www.faa.gov>
- **U.S. Postal Service:**
<http://www.usps.com/cpim/ftp/pubs/pub166/welcome.htm>
- **U.S. Customs:** <http://www.uscustoms.treas.gov>
- **American Association of Railroads:** <http://www.aar.org>
- **American Trucking Association:** <http://www.trucking.org>
- **National Cargo Security Council:** <http://cargosecurity.com/ncsc>
- **The World Health Organization:** <http://www.who.int/fsf>

*Consider researching government Internet sites to obtain funding resources (e.g., grants and loans) to enhance your security program.

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